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NOTES AND DISCUSSIONS.

PROFESSOR CAIRD REPLIES TO DR. STIRLING.

To the Editor of the Journal of Speculative Philosophy :

SIR:—In an article by Dr. Hutchison Stirling on “Schopenhauer in relation to Kant,” which appears in your last number, I find a criticism of some passages of my book on Kant, in relation mainly to the Category of Causality. As Dr. Stirling’s remarks contain an entire misrepresentation of my views, and as the points discussed are also of considerable interest for students of Kant, I must ask you to allow me a little space in your JOURNAL to make my reply.

Passing over some almost verbal criticisms, Dr. Stirling’s strictures may be brought under two heads. He accuses me of asserting, and asserting as the doctrine of Kant, that objective sequence cannot be known except by a mind that connects phenomena as causes and effects. He also accuses me of asserting, and asserting as the doctrine of Kant, that objects are known as objects through the Category of Causality alone. The former of these assertions is mine, and I am now prepared to reassert and justify it. The latter assertion has never been made by me; it is inconsistent with many express statements of my book; and I should never have supposed that any one could ascribe it to me, had not Dr. Stirling actually done so. I shall say a few words upon each of these points.

1. Does Kant assert that the Category of Causality is involved in the determination of objective sequence? To answer this question, I must briefly point out the general bearing of Kant’s Criticism of Pure Reason.

Kant’s view of experience may be summarized thus. In the *Æsthetic* he shows that inner and outer perception, involving as they do determinations of time and place, are possible only through the pure perception of Time and Space. For, he argues, a moment in Time and a place in Space can be represented by us only in relation to other times and other places and, therefore, in relation to the unity of Time and Space as individual wholes. We cannot perceive

any object of experience, as here and now present to us, except by relating it to one all-embracing Space, and one all-embracing Time. The particular is known through the universal, and as determined by it. In the *Analytic*, Kant takes another step; for there he seeks to show that no one thing or event can be known as objectively existing or occurring, except in so far as it is definitely related by means of the categories to other things and events, and, therefore, to the unity of experience as one all-embracing whole. Thus objective determination and reference to the systematic unity of experience are, for Kant, one and the same thing.

In working out this last thesis, however, Kant finds himself obliged to prove that the former determination of things, which was demonstrated in the *Æsthetic*, is not possible except through the latter, which is discussed in the *Analytic*; *i. e.*, that we cannot know things as in Time and Space without determining them by the Categories in relation to the unity of experience. In other words, while we cannot represent an object as existing, or an event as occurring, except in Space and Time, we cannot determine either to a definite place or time, except through the Categories, and especially through the Analogies of Experience. Now, these Analogies force us to treat every object as a permanent substance, standing in relation of action and reaction to other substances, and determined in its successive states by the law of Causality. Hence, although there is no difficulty in *thinking* of coexistence and succession in the abstract, without reference to the Categories of Causality and Reciprocity, it is also true that nothing can be *known* as existing or occurring at a definite place or time, unless it be also determined as standing to other objects and events in those definite relations expressed by the Analogies of Experience. It is in this sense that Kant says that Time and Space cannot be perceived in themselves, but only through the relation of objects and events in Time and Space, and that no object or event is capable of being determined directly in relation to Time and Space, but only indirectly through its determination by the Categories in relation to other objects and events.

Now, it may be alleged (cf. *Phil. of Kant*, p. 458) that men constantly do speak of events as occurring, and of objects as coexisting, without being aware that they are thus determining these events and objects in relation to each other by Causality and Reciprocity, just as men constantly reason without any knowledge of logical laws. But it is Kant's view, as I understand him, that in the determination of objects, as in Time and Space, there is involved an activity of thought which is governed and guided by these Categories, just as it

is also his view that in all our knowledge of objects there is involved a relation to the unity of the thinking self, although that relation is not clearly recognized, except by the reflective consciousness. Just, therefore, as Kant says that the "I think" must be capable of accompanying all our ideas of objects, seeing that all objects imply the activity and unity of the conscious subject, so he also maintains that no determination of objects as in Space and Time is possible except by the Principles of the pure understanding, and especially by the Analogies of Experience.

To say that "ten minutes to nine must absolutely precede five minutes to nine; one o'clock, two o'clock; Sunday, Monday; May, June — in short, every one moment of time another," and that "these are successions absolutely independent of Causality" (Dr. Stirling's article, p. 47), is, therefore, not to the point. For the determination of the separate times is possible, in Kant's view, only through the determination of the successive states of objects in relation to each other; and this, again, implies the permanence of substances, and the causal relation of their successive changes of state. In order to bring these presupposed relations into the light of consciousness, Kant has an expedient of his own which he frequently uses. He asks what would become of the unity of experience if the truth of these principles were denied. If we were to deny the principles of substance or causality, he argues, the consequence would be that we should have two successive experiences between which no relation could be established, and which, therefore, could not be determined by us as comprehended in one time. And in the same way he argues that, if we were to deny the principle of reciprocity, we should make it impossible to determine things as coexisting in one space. It is, therefore, a perfectly accurate account of Kant's position to say that he met Hume's reduction of the *propter hoc* to the *post hoc* by showing that "no mind is capable of the cognition *post hoc* which is not already capable of the cognition *propter hoc*." Nor is it to the point to say that there are many phenomena which are determined as successive, and which yet we do not conceive to be related as causes and effects. This, indeed, is palpable enough; for, even when they are so related we often do not know it, and have to search among the many phenomena which are previous to an effect for that which is its cause. But we *assume* that it is caused by something that went before it, and this assumption we make because it is just in relation to these previous phenomena that we have determined it to a definite moment in objective time. In dating it in short, we *ipso facto* assume it to be necessarily determined in relation to what precedes it, and this

necessary determination is just the causal relation. To date it thus in objective time would be "impossible, except to a mind that connects phenomena as cause and effect." Is it necessary to quote Kant for this? If so, take one passage where many are ready.

"That something happens is a perception which belongs to a possible experience, but it becomes an actual experience only when I regard the phenomena in question as fixed to a definite point in time, and, therefore, as an object which may always be found in the connection of perceptions by the aid of a rule. But this rule for the determination of things in relation to their sequence in time is, that in what precedes an event the condition must be found under which the event always (*i. e.*, necessarily) follows. Therefore, the principle of sufficient reason is the principle by which alone we can have objective knowledge of phenomena in regard to their sequence in time." (*Kritik*, Rosenkranz's edition, p. 170; Mr. Meiklejohn's translation, p. 149).

In conclusion, upon this point. I may say what I have suggested elsewhere, that Kant's argument would have been free from many difficulties if he had seen the relation of the different categories, and had not taken the principle of substance as pointing only to an underlying permanent identity, and the principle of causality as pointing only to different successive events, without inner identity.

2. The second of Dr. Stirling's charges against me is that I assert, and assert as the doctrine of Kant, that "objectivity results from the Category of Causality alone" (Dr. Stirling's article, p. 48), without the aid of any other category. My answer is that I never asserted anything of the kind, and that in many passages I assert the very opposite. Take one passage, in which I sum up the results of Kant's discussion of the principles of the pure understanding:

"In the last chapter we have considered the principles on which phenomena are determined as objects of experience, under conditions of Space and Time. Taking these principles together, we reach the general idea of Nature as a system of substances, whose quantum of reality always remains the same, but which, by action and reaction upon each other, are constantly changing their states according to universal laws. And the proof of this idea of Nature is not dogmatic, but transcendental, *i. e.*, it is proved that without it there could exist for us no Nature and no experience at all." (*Phil. of Kant*, p. 473; *cf.*, also, pp. 460, 470, etc.)

In these words I have declared, as clearly as possible, that the test of objective reality is to be found in the connection of experience, as

determined by all the Categories. My view, in fact, is just that which Kant expresses when he says that "nothing is to be admitted in the empirical synthesis which could be a hindrance to the understanding in establishing the continuous connection of all phenomena in one experience.."

Dr. Stirling's charge is based upon the fact that I refer to Schopenhauer, on one occasion, in connection with the Category of Causality. But surely one may refer to an author without adopting, or (as was the case here) without even remembering all his opinions. All that I meant to say in the passage which Dr. Stirling quotes from my book is that Kant, in his deduction of the principle of Causality, sometimes speaks as if we could be conscious of our perceptions as successive states in our minds, before we determine them as objectively successive. And to this Berkeleian way of looking at the matter it seems fair to object that it supposes as known, irrespective of causality *in one instance*, what, according to Kant's own principles, cannot be known at all except through causality. When Kant says that the fact that I see the parts of a house successively is not to be made the ground of an objective judgment of sequence in relation to the house, as it may be in the case of a vessel sailing (or "drifting," if Dr. Stirling thinks the phrase of any importance) down the stream, he supposes me to have determined my perception of the parts of a house as successive. But what I contend is that, on Kant's own principles, it is not possible to determine any series, whether of perceptions or of external events, as an objective or real succession, except through the Category of Causality; and that, therefore, it is not open to him to treat any one succession as if it were purely subjective, and then to use it as a stepping-stone to the determination of other successions as objective. In any case, that is, causality is involved in the determination of succession. That this is my meaning will, I think, be perfectly obvious to any one who will read pages 278-281, or again, pages 352-356 of my book, where another form of the same assumption is criticised. How Dr. Stirling can find in my words anything like the assertion that "objectivity results from the Category of Causality alone," I am unable to discover. The passage in question is concerned only with objective *sequence*, and it is both preceded and followed by passages in which objective coëxistence is shown to involve reciprocity, and objective *existence* (the basis of all) to involve the category of substance.

I have now answered all the matter of Dr. Stirling's attack upon my views, so far as it seems to me to require any answer. The man-

ner of his attack I have no wish to retaliate. Under the torrent of contemptuous words — some of them fearfully and wonderfully made — which he has been pleased to pour upon me, I feel almost inclined to say, with Falconbridge —

“Zounds! I was never so bethumped with words,
Since first I called my brother’s father ‘dad.’”

Dr. Stirling is undoubtedly a man of great philosophical powers; I have always regarded him as in some sense a master in philosophy; but I think it were well if he could learn to use the language of those who can afford to respect others because they respect themselves.

I am, sir, your obedient servant,

EDWARD CAIRD.

UNIVERSITY OF GLASGOW, March 8, 1879.

VOLUNTARY MOTION.

In the *Popular Science Monthly* for August, 1878, there is an interesting discussion, by Professor Payton Spence, M.D., of the question of the rise of voluntary motion. The muscles involved in the pronunciation of the sound of A are assumed at twenty, including those of the vocal chords, the back part of the mouth, the tongue, the cheeks, the lips, and the chest. Allowing three distinct degrees of contraction of each muscle, he finds 3,113,884,401 possible combinations of muscular contractions, only one of which can produce the sound A. Supposing the child to know nothing about it, and to have no organic tendencies in the direction towards it, in learning how to make this sound by combinations of muscles, the child would experiment for thirty years, making 100 experiments in a minute.

When we consider that the child learns, not only one of the possible combinations of twenty muscles, but the entire command of the combinations of the 450 muscles of the body, we see that the accumulated acquisitions of the slow experience of his race, and of all animals, form a reservoir of inherited acquirement in each individual, and that, in comparison to this inherited ability, the ability that he acquires by his own experience amounts only to the ratio of 1 in 100,000.